PATENT ABSTRACTS OF JAPAN

(11)Publication number: 06-090030

(43)Date of publication of application: 29.03.1994

(51)Int.CI. H01L 35/32

G01K 7/00 G01K 7/02

(21)Application number: 04-265402

(22)Date of filing: 08.09.1992

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(54) THERMO-ELEMENT SHEET

(57) Abstract:

PURPOSE: To prevent heat in a clearance of a thermo-electric semiconductor from being lost by convection, conduction and radiating by forming a thermo-element by connecting a unit structure wherein one end of a pair of thermo-electric semiconductor of a specified heat flow length by an electrode by a connection electrode and by laminating a sheet layer with the thermo-element interposed between insulation sheet materials.

CONSTITUTION: A plurality of connection electrodes 3 are formed on a surface of a sheet material 2 at specified intervals by spray print by a mask and then stabilized by sintering. After clearances 7, 8 of a thermo-electric semiconductor wherein a pair of thermo-electric semiconductor 5, 6 of p-type and n-type with a specified heat flow length are formed by a similar method are charged with a thermal insulation material 9 of small heat conductivity, an electrode 4 is formed by a similar method to connect an upper edge face of a pair of thermo-electric semiconductors 5, 6 of p-type and n-type to form a unit sheet layer 10. After a purality of unit sheet layers 10 are laminated to a shape of a heat conduction part such as a plane and connected to the outside of the electrode 4, they are dried, sintered and stabilized to be formed to a thermo-element sheet 11.

LEGAL STATUS [Date of request for examination] 08.09.1992

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 2636119

[Date of registration] 25.04.1997

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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